



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT

In re application of: Ni *et al.*

Application No.: 09/347,583

Filed: June 30, 1999

Title: MOVEABLE BARRIER FOR MULTIPLE ETCH PROCESSES

Attorney Docket No.:
LAM1P111/P0513

Examiner: C. Brown

Group: 1765

COPY OF PAPERS
ORIGINALLY FILED

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail to: Assistant Commissioner for Patents, Washington, DC 20231 on January 16, 2002.

Signed:

Deborah Neill

RESPONSE C

Assistant Commissioner for Patents
Box Non-Fee Amendment
Washington, D.C. 20231

Sir:

RECEIVED
FEB 19 2002
TC 1700

This reply and the enclosed remarks are submitted in response to the non-final Office Action mailed on October 19, 2001. Applicants submit that the attached remarks fully address the issues raised in the Office Action.

REMARKS

Claims 1-13 have been rejected by the Examiner. Claims 1-13 are pending in this Application. Applicants respectfully request reconsideration of the rejections set forth in the Office Action dated October 19, 2001 in view of the following remarks.

The present invention relates to a diffusion barrier that can be positioned in multiple positions relative to a wafer. One known approach for improving etch rate uniformity in a chemically driven etch process is to install a diffusion barrier around the wafer perimeter. However, diffusion barriers are not used during ion-assisted (or ion-driven) etch processes (e.g. a plasma enhanced etch process). More specifically, the diffusion barrier is believed to quench the plasma and thus disturb the ion density uniformity in the plasma. If the barrier were to be used, the plasma density near the